

FORUM OBJECTIVES

Mr. Samuel P. Williamson, Federal Coordinator for Meteorological Services and Supporting Research

Synopsis: Mr. Williamson provided the history, purpose, and objectives of the Forum. His presentation (see Appendix B) specifically covered types of hazards, impacts of natural hazards, definitions, statute/guidance compliance, forum objectives, and a primer on the Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM). He described the types of hazards that encompass 1) natural hazards: weather and weather related (tornadoes, hurricanes, hailstorms, drought, coastal erosion), earthquakes, volcanoes, space environmental disturbances; and 2) technological hazards: dam failures, nuclear accidents, fires, and hazardous material events.

The impacts of natural hazards are impressive in terms of cost in lives and resources. From 1993-1996, meteorological disasters cost the U.S. about one quarter billion dollars per week. Earthquakes and hurricanes were the primary causes of the monetary losses. From 1975-1994, more than 6,000 people were killed and 50,000 injured in natural disasters. Mr. Williamson emphasized the importance of having a common set of definitions of risk related terms for use in this forum and follow-on activities. The terms defined included hazard, natural hazard, risk, risk assessment, risk management, and risk mitigation. Mr. Williamson next described the statutes and guidance compliance that covers risk assessments that are 1) not related to natural hazards and 2) related to natural hazards. For the first instance, three Acts were listed for the Environmental Protection Agency (EPA), four for the U.S. Department of Agriculture (USDA), and others for the U.S. Forest Service (USFS), Bureau of Land Management (BLM), U.S. Fish and Wildlife Service and the Department of Defense (DOD). Statutes and guidance compliance for risk assessments related to natural hazards include the Earthquake Hazards Reduction Act of 1977, the Water Resources Development Act, the National Drought Policy Act, the Coastal Zone Management Act of 1972, the Department of the Interior and Associated Agencies Appropriations Act 2001, and Executive order 13151.

Mr. Williamson next described the Forum's overarching issues and challenges that need to be addressed, including examining risk assessment processes and ways to build a consensus to proceed with a national natural hazard assessment. The intent of the Forum is to update the participants on programs and processes that have been implemented or are ready to be implemented; identify promising programs that will need on-going support to reach fruition; and illuminate gaps where neither the government agencies nor the private sector has work planned or in progress. Hopefully, a consensus can be reached leading to coordinated risk assessment and management of natural hazards through legislative proposals, policy guidance, and agency cooperation.

Finally, Mr. Williamson reminded the audience about the mission and coordinating infrastructure of the OFCM. The mission is to ensure the effective use of Federal meteorological resources by leading the systematic coordination of operational weather requirements, services, and supporting research, among the Federal agencies (currently fifteen). The coordinating infrastructure is organized into a Federal committee, an interdepartmental committee, standing committees for various specialized areas, and program councils. OFCM membership and affiliations cover a broad range of weather, atmospheric, climate and technology organizations and associations.

Ms. Margaret Lawless, Chairperson of the Subcommittee for Natural Disaster Reduction (SNDR) and Acting Executive Associate Director for Mitigation, Federal Emergency Management Agency (FEMA)

Remarks. Natural disasters are a global concern. During the 1990's, the global community has seen a paradigm shift in emergency management. While continuing to streamline and improve response and recovery operations, we have increasingly embraced the importance of mitigation as a means of reducing disaster losses.

This Forum is, in fact, a recognition that the foundation of mitigation is risk assessment. The time has come to make a national multi-hazard risk assessment. Through our discussions over the next two days, we will hear about the tools currently available, we will learn what different agencies are currently doing in this area, and we will identify specific actions for how we can come together as the Federal Government to accomplish this critical need. From FEMA, you will hear about our progress with expanding the HAZUS (Hazards U.S.) loss-estimation model to encompass the earthquake, flood, and wind hazards. Incorporating data on: infrastructure, building inventory, geology, damage estimation formulas, and critical operating center locations, HAZUS estimates structural damage and forecasts casualties. You will also hear an update on our flood map modernization efforts, but we have to be mindful that having the tools is not the ultimate goal.

Scientific research, forecasting, modeling, warning systems are only valuable when they are applied and when they are put into practice. With HAZUS, this has already begun. In the last 3-4 years since the HAZUS earthquake module was released, we have already seen widespread use in the public and private sectors. For example, Charles Schwab has used HAZUS for business continuity planning; the State of California has used it to develop its own statewide earthquake risk assessment; and users groups have formed, such as the Bay Area HAZUS Users Group, which brings together nearly 100 public and private sector organizations to focus on planning, coordinating, and disaster response protocols. Their website address is HAZUS.org. Southern California is also in the process of forming a HAZUS Users Group, and Senator Feinstein used the HAZUS earthquake risk assessment in the legislative process to identify the level of risk for particular communities and in proposing financial incentives for earthquake mitigation actions.

Following this focus on implementation, we will hear updates on FEMA's Project Impact initiative and its corollary, Disaster Resistant Universities. From the beginning, in 1997, Project Impact has emphasized the importance of risk assessment as the starting point for creating disaster resistant communities. With its advocacy of an interrelated process incorporating risk assessment, local level involvement, private sector partnerships, and a long-term investment in prevention measures, Project Impact has radically changed how communities, nationwide, approach reducing disaster losses.

Developing a national multi-hazard risk assessment is fundamental to making our Nation safer from disasters. The Congress has also recognized this. In October 2000, Congress passed the Disaster Mitigation Act to amend FEMA's authorizing legislation, the Stafford Act. In addition to authorizing a pre-disaster mitigation program and increasing funding for post-disaster mitigation contingent on pre-disaster planning, Congress has asked FEMA to pilot the generation of multi-hazard advisory maps. These are defined as "maps on which data concerning each type of natural disaster is identified simultaneously for the purpose of showing areas of overlap" in a minimum of 5 states. This is a clear endorsement of the course we have already charted. As we proceed towards a national multi-hazard risk assessment, we must come together to share our

strengths and to leverage each other's work. Congress recognizes the contributions of agencies across the Federal government and used the Disaster Mitigation Act to create an Interagency Task Force to coordinate "the implementation of pre-disaster hazard mitigation programs administered by the Federal Government."

While this particular task force may be new, our working relationships are not. The Office of the Federal Coordinator for Meteorological Services and Supporting Research has, of course, been serving to collaborate across agencies for many years. In addition, the Subcommittee on Natural Disaster Reduction (SNDR) includes membership of nearly 20 agencies, many of which are attending this Forum. Reflecting a greater emphasis on applied research and implementation, the mission of the SNDR has been modified over time to include both developing the necessary scientific information and applicable tools and to focus on applying these tools. Recent activities of the SNDR include a November 2000 report "Effective Disaster Warning Systems," on public and private sector R&D (Research and Development) capability to provide early warning of natural or technological hazards that threaten the safety of the Nation. This has been posted on the CENR and the SNDR web page (see below).

Public-Private Partnership 2000 (PPP-2000) was a series of 14 forums held from September 1997 through 1999 to identify new and innovative opportunities for government and nonprofit, private sector organizations to work together to reduce vulnerability to and losses from natural hazards in communities throughout the Nation. A final draft report has been completed and is in concurrence for publication.

As an outgrowth of PPP-2000, Congress created the Natural Hazards Caucus. Co-chaired by Senator Ted Stevens (R-AK) and Senator John Edwards (D-NC), this Caucus seeks to educate Members and staff about the costs of natural disasters to their districts and states, and the benefits their constituents will realize through greater efforts to understand, prevent, and mitigate natural disasters.

A working group on Remote Sensing Applications, co-chaired by USGS (U.S. Geological Survey) and NOAA/NESDIS (National Environmental Satellite, Data, and Information Service) was established to study how data from current and planned Earth Observation satellites can be employed more effectively to mitigate losses from disasters. This Forum is an excellent opportunity for us to come together as the Federal Government, to move from thought to action and from concept to application, and to make the national multi-hazard risk assessment a reality.

Some reference web sites are: www.HAZUS.org and www.nnic.noaa.gov/CENR/cenr.html

